New Patent Claims:

IAPS REC'S POTIFIE 20 JUL 2006

- 1. System for performing crash tests, wherein at least one driverless, multi-track vehicle is movable along a predetermined path with a speed predetermined for a crash location, comprising:
 - a guide device (12) for defining a predetermined path,
- a speed guide device for defining a predetermined speed to comply with at at least one location of the predetermined path and
 - a driverless, multi-track vehicle having
 - a drive apparatus (30) for driving at least one vehicle wheel,
- a braking apparatus (8; 30) for selectively braking at least two wheels (4, 6) disposed on different sides of the vehicle,
- a guiding device (10, 14) for calculating a deviation between the predetermined path (12) and the actual path and
- a control device (14) for controlling the operation of the vehicle such that the vehicle is movable along the predetermined path with a speed that is predetermined for the crash location, characterized in that:

the operation of the drive apparatus (30) and/or the braking device (8; 30) is controllable by the control device (14) such that, when there is a deviation between the actual path and the predetermined path, the direction of the vehicle is changeable by selectively changing the torques acting on the wheels such that the deviation decreases.

- 2. System according to claim 1, wherein the drive apparatus (30) and the braking apparatus (8; 30) cooperate together such that the vehicle speed does not change in consequence of a braking intervention for the purpose of converging the actual path with the predetermined path.
- 3. System according to claim 2, wherein the control device (14) is disposed in the vehicle and comprises a data memory, in which values dependent on the operation of the wheel brakes are stored for controlling an internal combustion engine of the vehicle such that the sum of the vehicle-driving moment of the internal combustion engine and the brake moment of the wheel brakes effective for the purpose of correcting the direction of the vehicle is at least approximately constant.

English Translation of Annex to IPER - Art. 34 PCT Claims

- 4. System according to claim 2, wherein the drive apparatus and the braking apparatus are formed by at least two selectively-controllable motors (30) that drive wheels (4, 6) disposed on different sides of the vehicle and are controlled by the control device (14) such that when there is a deviation between the predetermined path and the actual path the vehicle changes its direction by selectively changing the moments acting upon the wheels such that the deviation decreases
 - 5. System according to one of claims 1 to 4, characterized in that the vehicle (2) carries a barrier (34) for a collision with another vehicle.
 - 6. System according to one of claims 1 to 5, wherein the guide device comprises a navigation apparatus that works by distance measurements to predetermined reference locations.
 - 7. System according to one of claims 1 to 6, wherein the control device (14) controls the vehicle speed such that it follows the predetermined path with a predetermined speed progression.